

GENERAL ACUPUNCTURE

## **Toxic Mold**

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Mold has been around for more than 3 billion years. Most molds are quite harmless, and we have all lived with mold mostly without incident. However, toxic molds can be a whole other issue. What differentiates toxic molds from regular molds is that the toxic molds produce mycotoxins (also called neurotoxins). It's these neurotoxins that can create extensive, multiple health-related problems. Fortunately, most molds are neither toxic nor harmful. However, with toxic mold exposure, neurotoxins can create an entire multisystem level of physical illness, with symptoms ranging from respiratory problems to gastrointestinal and neurological problems.

Many people simply don't understand or believe that toxic mold can make an individual ill. Because of the increasing number of cases of toxic mold exposure, people understandably can be skeptical and all the more suspicious. The most common reaction and question is that since mold has been with us since the beginning of time, why are we only in the last number of years hearing about this?

There are a number of reasons we are seeing an increase in mold-related illness. By far the biggest contributors to the toxic mold problem are changes in construction and how structures are built. To lessen costs, certain types of wood are being used that happen to be less resistant to mold. When this wood is left out in the open (such as in lumber yards) and in the rain, mold will begin to grow on the wood, which is then used to build homes and other structures. Buildings are built more tightly, with less air flow to save on energy costs, which can fuel the growth of mold. Coupled with leaks from problematic plumbing and synthetic materials used in buildings, this is a combination for disaster, causing mold to proliferate within the walls. However, mold can grow on any porous surface or material, such as wood, drywall, ceiling tiles, carpets, upholstered furniture items and clothing.

Mold thrives in certain conditions. Darkness and moisture, along with little to no air flow, are components that will fuel the growth of mold in any environment. Mold requires a food source, such as water. With this, the growth of mold can occur anywhere within 48 to 72 hours. Mold will proliferate and reach its peak at night and in humid or moist conditions. Molds can vary in color, including black, gray, brown, white or green. Often, there is a musty or other type of odor present.

Testing the mold is the only way to determine its toxicity. There are environmental companies that specialize in such testing. They take samples from the air, inside the walls, and/or from the mold itself, if visible. If one is unable to afford professional testing and the mold is visible, individuals can purchase mold test kits for identification either online or at hardware and home-repair shops. Testing will identify the types of molds found and the levels of each type in measurement of spore counts. It's estimated there are approximately 100 common indoor mold types with the potential to be hazardous to one's health in a wide variety of ways. Common molds that can cause health-related problems include aspergillus, penicillium, cladosporium, chaetomium and stachybotrys (also known as "toxic black mold").

When mold begins to grow inside the walls, it can take years before it becomes visible.

Unfortunately, by the time the mold becomes visible, it already might be causing serious health problems. Well before the mold ever becomes visible, the spores move out into the air through any microscopic openings, vents and outlets. Many mold spores are as small as 1 micron and easily can move through various structures. An individual oftentimes starts to become ill without any visible outward signs a problem is occurring. So, usually by the time the mold is visible, much damage already could have taken place without anyone realizing the extent.

Not all individuals are susceptible to toxic mold. Sometimes, in a family living in an environment contaminated with toxic molds, only one individual might become ill from this exposure. At other times, entire families will develop symptoms. To make things more complicated, not everyone develops the same symptoms. It's imperative to recognize what might be signs and symptoms of patients exposed to toxic molds, and to understand that this is a legitimate and serious syndrome.

The major complicating factor to a correct diagnosis is the fact that oftentimes, multiple physiological systems simultaneously will be affected, with patients presenting with a full range of complaints that appear to be unrelated. Because so many systems can be affected, individuals routinely are misdiagnosed. Symptoms also can mimic many different types of disorders. Few physicians have the training necessary to recognize a toxic mold syndrome.

Individuals actually suffering from toxic mold exposure routinely are misdiagnosed with chronic fatigue syndrome or fibromyalgia. Irritable bowel syndrome is another common misdiagnosis. Symptoms can mimic autoimmune and neurological disorders. Perimenopausal- and menopausal-age women suffering from mold-related symptoms often are misdiagnosed, with their symptoms being attributed to menopausal changes. Sometimes physicians unable to find any cause to the patient's ongoing complaints inform the patient that nothing is wrong, and they are placed on antidepressant medication.

A patient might present with symptoms that affect multiple systems; this can occur from respiratory, neurological, gastrointestinal and renal symptoms. Respiratory problems often are common, which can range from allergies to chronic colds and flu, chronic bronchitis, laryngitis and respiratory infections. On rare occasions, cough with blood can occur. Individuals often can experience and present with complaints of headaches, dizziness and fatigue. Any number of symptoms might be present. Diarrhea also is a very common symptom. Chronic urinary tract infections also can occur. Memory impairment, word-finding problems and poor concentration also are common and usually are part of the presenting complaints. Rashes from psoriasis, eczema and dermatitis can be present, especially in the early stages. Multiple chemical sensitivity disorders and tremors might occur. Depression can be part of the presenting picture, especially when multiple systems have been affected.

The severity of symptoms can vary, depending on the severity of exposure in the levels of the toxic molds present in the environment, the types of molds found and the length of time exposed. It's not uncommon for patients exposed to elevated levels of toxic molds over prolonged periods of time to have experienced all of these symptoms and more. However, there have been cases of patients becoming extremely ill after being exposed for relatively short periods of time.

In a toxic mold exposure, the immune system works overtime. An inflammatory type of response is created, resulting from exposure to the neurotoxins contained within these molds. It's this inflammatory response that causes so many different symptoms. In cases such as these, you don't want to stimulate the immune system with acupuncture, for this can overtax the system. ÊAs far as acupuncture treatment with a mold case, superficial insertion with limited needles often is the better way to go. The use of herbs is the preferred method, using the same principle of caution as with any type of tonification.

Because there are so many variations of the manifestations of symptoms and types of exposure, treatment is highly individualized and can be very resistant. Systemically, what is occurring in sensitized individuals exposed to toxic molds is that the neurotoxins are not being eliminated through the gastrointestinal tract. Instead, the neurotoxins are reabsorbed back into the system before they can be eliminated. Once an individual has been removed from the toxic environment, most of their symptoms will clear up within a few months. However, some patients will continue to experience difficulties. Patients who have had long-term and severe exposure will be more apt to develop permanent sensitivity to the molds. Secondary exposures can cause more acute and permanent problems. Some patients continue to struggle with symptoms as a result of exposure to toxic molds that becomes irreversible.

We are paying a heavy cost with health-related problems as a result of environmental pollutants in our homes and in the workplace. It's now said that indoor pollution from our environments is greater than outdoor pollution. Contamination of mold, as well as exposure to chemical fumes produced from synthetic materials used in our buildings, are responsible for causing many symptoms that individuals are seeking treatment for, and they often are not being diagnosed properly.

It's imperative to understand the legitimate physiological and psychological implications of patients who have been exposed to toxic molds and become ill, and how they have been affected. Exposure to toxic mold and illness from toxic mold is an ever-increasing, legitimate problem that we as practitioners of Chinese medicine need to understand better. If nothing else, just the simple understanding of a few basic principles and actions to be taken can help reduce mold exposure.

Air purifiers and filters can be of assistance in reducing the amount of mold in the air and should be used. Ultraviolet germicidal lighting has been used inside of the walls in strategic areas to help stop the growth of mold. Keeping good air flow and letting in as much light as possible also will help to reduce the growth of mold. Having hard surfaces instead of carpeting, along with wood and leather furniture instead of upholstered items, is far more efficient in cleaning and not retaining spores. Using vacuums with 3M and/or hepafilters, and wet wiping instead of dusting, also can help to reduce mold spores.

By educating ourselves and our patients on mold exposure and related illness, we know what to look for and are better able to protect our patients, our environments and ourselves. What might appear to be a small amount of harmless mold might be an indication of water damage with a far more extensive mold problem than is visible. We need to become more vigilant in exploring health-related problems that might be a result of exposure to toxic molds from within the environment in which we live and work.

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